



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,564	06/26/2003	Kulvir S. Bhogal	AUS920030166US1	5157
35525	7590	08/07/2006	EXAMINER	
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			PONIKIEWSKI, TOMASZ	
			ART UNIT	PAPER NUMBER
			2165	

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/607,564	<b>Applicant(s)</b> BHOGAL ET AL.	
	<b>Examiner</b> Tomasz Ponikiewski	<b>Art Unit</b> 2165	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/10/2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Remarks**

1. The Amendment filed on May 10, 2006 has been received and entered. Claims 1-20 are pending.
2. Applicant's amendment has overcome previous claim objections and rejection under 112 2<sup>nd</sup>.

### ***Claim Objections***

3. Claims 1, 6, 9-10, 12, 14-15, 17-18, and 20 recite the word "for" in the body of the claims. It indicates intended use and as such does not carry patentable weight. The word could be changed to recite "to". The limitations following the phrase "for" describes only intended use but not necessarily required functionality of the claim. Limitations following the phrase "for" do not carry patentable weight, which cause the claims to appear as a series of non-functional descriptive material/data without any functional relation with each other. Applicant is required to amend the claims so that the claim limitations are recited in a definite form.

Claims 3, 6, and 14 are objected to because of the following informalities: the recitation of "if" makes the statement(s) following the recitation totally optional. As such the action does not have to occur. Appropriate correction is required.

Claims 1, 3, 6, and 14-15 are objected to because of the following informalities: the recitation of "using" draws toward intended use. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 6, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 states that "using the user display interface, populating the database query statement." However the query has already been populated with received query. How can it be populated later? Is the query displayed or executed or stored?

Claim 1 recites the word "for" in the preamble. There is no nexus between preamble and the body of claim because "for" is intended use never having to be realized and body of the claim doesn't recite the intended use of "providing context sensitive database assistance".

Claim 6 recites the limitation "the each database" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "the apparatus" in line 10. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 20 is not limited to tangible embodiments. In view of Applicant's disclosure, specification page 20, lines 16-25, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., a hard disk drive) and intangible embodiments (e.g., light wave transmissions). As such, the claim is not limited to statutory subject matter and is therefore non-statutory. To overcome this type of 101 rejection the claims need to be amended to include only the physical computer media (i.e storage media) and not a transmission media or other intangible or non-functional media. For this application tangible does could cover transmission media as well, therefore it would cover wave transmission, which is non-statutory subject matter. In this case the proper correction should be "computer storage medium".

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-3, 6-7, and 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Weinberg et al. (US 6,938,038 B2).

As per claim 1 Weinberg et al. is directed to a method, in a data processing system comprising a user display interface for displaying of information to a user of the data processing system, for providing context sensitive database assistance in an integrated development environment, the method comprising:

receiving a database query statement (column 10, lines 17-18);

responsive to activation of a database assistance function, generating a database assistance interface based on at least a portion of the database query statement and database information for each database usable in a project (column 10, lines 23-26);

displaying the database assistance interface on the user display interface (column 10, lines 20-21, wherein multiple layers could mean modules inside an interface, which could be interfaces themselves; column 10, line 25); and

responsive to user input using the user display interface, populating the database query statement (column 10, lines 22-30).

As per claim 2 Weinberg et al. is directed to the database assistance interface displayed on the user display interface includes one of a database selection interface, a table selection interface, a column selection interface, a record insertion interface, a column value set interface, and a search condition interface (column 10, lines 20-23; column 10, lines 29-30).

As per claim 3 Weinberg et al. is directed to determining whether a table name in the database query statement is ambiguous with respect to other table names in the each database, and if so, providing, a table selection interface for selecting a table from a plurality of candidate tables using the user display interface (column 11, lines 52-61, wherein "table name" could mean "field").

As per claim 6 Weinberg et al. is directed to determining whether a column name in the database query statement is ambiguous with respect to other column names in the each database, and if so, providing, a column selection interface for selecting a

column name from a plurality of candidate column names using the user display interface (column 11, lines 52-61, wherein "column" could mean "field").

As per claim 7 Weinberg et al. is directed to the database assistance interface presents metadata on the used display interface to assist a user (column 10, lines 23-24; column 11, lines 10, wherein "metadata" could mean "lookup fields").

As per claim 12 Weinberg et al. is directed to an apparatus for providing context sensitive database assistance in an integrated development environment, the apparatus comprising:

receipt means for receiving a database query statement (column 10, lines 17-18);

generation means, responsive to activation of a database assistance function, for generating a database assistance interface based on at least a portion of the database query statement and database information for each database usable in a project (column 10, lines 23-26);

display means for displaying the database assistance interface on the user display interface that displays information to a user of the apparatus (column 10, lines 20-21, wherein multiple layers could mean modules inside an interface, which could be interfaces themselves; column 10, line 25); and

assistance means, responsive to user input, for populating the database query statement (column 10, lines 22-30).



As per claim 13 Weinberg et al. is directed to the database assistance interface displayed on the user interface includes one of a database selection interface, a table selection interface, a column selection interface, a record insertion interface, a column value set interface, and a search condition interface (column 10, lines 20-23; column 10, lines 29-30).

As per claim 14 Weinberg et al. is directed to determining whether a table name in the database query statement is ambiguous with respect to other table names in the each database (column 11, lines 52-61, wherein “table name” could mean “field”),

means for providing a table selection interface for selecting a table from a plurality of candidate tables using the user display interface if the table name is ambiguous (column 11, lines 52-61).

As per claim 15 Weinberg et al. is directed to determining whether a column name in the database query statement is ambiguous with respect to other column names in the each database (column 11, lines 52-61, wherein “column name” could mean “field”),

means for providing a column selection interface for selecting a column name from a plurality of candidate column names using the user display interface (column 11, lines 52-61).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4-5, 8-11, and 16-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg et al. (US 6,938,038 B2) in view of Rische (US. 2002/0107840 A1).

As per claim 4 Weinberg et al. does not teach the plurality of candidate tables exist in a plurality of databases.

Rische does teach the plurality of candidate tables exist in a plurality of databases (Rische, page 3, paragraph 0024, lines 5-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberg et al. with those of Rische to include teach the plurality of candidate tables exist in a plurality of databases because plurality of information available in multiple databases (Rische, page 3, paragraph 0024, lines 8-9).

As per claim 5 Weinberg et al. does not teach the plurality of candidate tables exist in a plurality of schemas.

Rische does teach the plurality of candidate tables exist in a plurality of schemas (Rische, page 3, paragraph 0028, lines 32-34, wherein “tables” could mean “categories”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberg et al. with those of Rische to include teach the plurality of candidate tables exist in a plurality of schemas because it allows simplified identification of relationships (Rische, page 3, paragraph 0028, lines 32-33).

As per claim 8 Weinberg et al. does not teach receiving database information for each database usable in the project; and storing a local data model for each database.

Rische does teach receiving database information for each database usable in the project (Rische, page 3, paragraph 0023, lines 3-5; page 3, paragraph 0024, lines 1-5, wherein modification of databases requires receiving information about the databases); and storing a local data model for each database (page 5, paragraph 0035, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberg et al. with those of Rische to include receiving database information for each database usable in the project; and storing a local data model for each database because receiving database information is critical to making modifications and keeping the model saved locally decreases time required for adaptation.

As per claim 9 Weinberg et al. as modified teaches method of claim 8, wherein the step of storing a local data model includes:

connecting to a database (Rische, page 3, paragraph 0028, lines 11-13, where “connecting” means using Open database Connectivity);

retrieving a data model for the database (Rische, page 5, paragraph 0035, second column, lines 7-19, wherein “retrieving” means “projecting” and “data model” means “schema”); and

storing the data model for the database locally (Rische, page 5, paragraph 0035, lines 19).

As per claim 10 Weinberg et al. as modified teaches method of claim 8, wherein the step of storing a local data model includes:

connecting to each database (Rische, page 3, paragraph 0028, lines 11-13, where “connecting” means using Open database Connectivity);

determining whether a data model for each database has changed (Rische, page 3, paragraph 0034, lines 8, wherein update statement implies that data was modified); and

responsive to a data model for a database having changed, updating a local data model for the database (Rische, page 5, lines paragraph 0034, lines 8-9).

As per claim 11 Weinberg et al. does not teach database information includes at least one of schema name, database name, username, password, and port number.

Rische does teach database information includes at least one of schema name, database name, username, password, and port number (Rische, page 3, paragraph 0024, lines 11-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberg et al. with those of Rische to include database information includes at least one of schema name, database name, username, password, and port number because it identifies what the desired data may contain (Rische, page 3, paragraph 0024, line 16).

As per claim 16 Weinberg et al. does not teach means for receiving database information for each database usable in the project; and means for storing a local data model for each connection.

Rische does teach means for receiving database information for each database usable in the project (page 3, paragraph 0023, lines 3-5; page 3, paragraph 0024, lines 1-5, wherein modification of databases requires receiving information about the databases); and means for storing a local data model for each connection (page 5, paragraph 0035, lines 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberg et al. with those of Rische to include receiving database information for each database usable in the project; and

storing a local data model for each database because receiving database information is critical to making modifications and keeping the model saved locally decreases time required for adaptation.

As per claim 17 Weinberg et al. as modified teaches apparatus of claim 16, wherein the means for storing a local data model includes:

means for connecting to a database (Rische, page 3, paragraph 0028, lines 11-13, where “connecting” means using Open database Connectivity);

means for retrieving a data model for the database (Rische, page 5, paragraph 0035, second column, lines 7-19, wherein “retrieving” means “projecting” and “data model” means “schema”); and

means for storing the data model for the database locally (Rische, page 5, paragraph 0035, lines 19).

As per claim 18 Weinberg et al. as modified teaches apparatus of claim 16, wherein the means for storing a local data model includes:

Means for connecting to each database (Rische, page 3, paragraph 0028, lines 11-13, where “connecting” means using Open database Connectivity);

means for determining whether a data model for each database has changed (Rische, page 3, paragraph 0034, lines 8, wherein update statement implies that data was modified); and

means, responsive to a data model for a database having changed, updating a local data model for the database (Rische, page 5, lines paragraph 0034, lines 8-9).

As per claim 19 Weinberg et al. does not teach database information includes at least one of schema name, database name, username, password, and port number.

Rische does teach database information includes at least one of schema name, database name, username, password, and port number (Rische, page 3, paragraph 0024, lines 11-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberg et al. with those of Rische to include database information includes at least one of schema name, database name, username, password, and port number because it identifies what the desired data may contain (Rische, page 3, paragraph 0024, line 16).

As per claim 20 Weinberg et al. is directed to a computer program product, tangibly embodied in a tangible computer readable medium, for providing context sensitive database assistance in an integrated development environment, the computer program product comprising:

instructions for receiving a database query statement (column 10, lines 17-18);

instructions for responsive to activation of a database assistance function, generating a database assistance interface based on at least a portion of the database query statement (column 10, lines 23-26);

instructions for displaying the database assistance interface on a user display interface that displays information on the apparatus (column 10, lines 20-21, wherein multiple layers could mean modules inside an interface, which could be interfaces themselves; column 10, line 25); and

instructions for responsive to user input using the user display interface, populating the database query statement (column 10, lines 22-30).

Weinberg et al. does not teach instructions for receiving database information for each database usable in the project.

Rische does teach instructions for receiving database information for each connection usable in a project (Rische, page 3, paragraph 0023, lines 3-5, wherein modification of databases requires receiving information about the databases);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberg et al. with those of Rische to include receiving database information for each database usable in the project because receiving database information is critical to making modifications.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

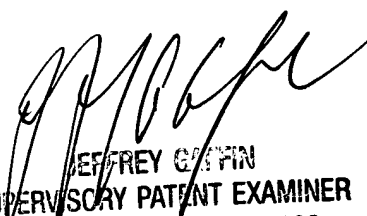
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571)272-1721. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2165

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tomasz Ponikiewski  
August 2, 2006



JEFFREY C. GRIFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100